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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,466	12/21/2001	Roger Bradshaw Quincy III	KCC-17,458	5169

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EXAMINER

ANDERSON, CATHARINE L

ART UNIT PAPER NUMBER

3761

DATE MAILED: 11/25/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,466

Applicant(s)

QUINCY, ROGER BRADSHAW

Examiner

C. Lynne Anderson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quincy, III (US 2002/0077612) in view of Worely (6,548,054).

4. With respect to Claims 1-8, 10-13, 16-19, 21-23, 30 and 31: Quincy discloses the use of an absorbent article (20) with odor controlling properties, with an absorbent core (50) that is a plurality of non-woven fibers (page 4, paragraph 0045), and includes a halogenated polystyrene hydantoin (page 3, paragraph 0037), in the ratio of 6% (page 6, paragraph 0061). Quincy discloses the hydantoin can also be disclosed on the outer

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cover (page 4, paragraph 0045), which is made of non-absorbent non-woven fibers (page 5, paragraph 0050).

5. Quincy however, does not disclose any specifics of the polystyrene hydantoin. Worely discloses a method for preparing biocidal polymers, where the halogenated polystyrene hydantoin with a repeating group which contains amide and imide atoms, and the halogen atoms are linked to the amide nitrogen atom (see Column 4, lines 34-63). Worley discloses an embodiment in which the halogen atoms are chemically linked to the amide nitrogen atom, and hydrogen is chemically linked to the imide nitrogen atom. Worley therefore discloses 100% of the halogen atoms are linked to the amide nitrogen. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have the hydantoin of Quincy, be the hydrogenated polystyrene hydantoin of Worely, in order to provide a biocidal polymer that is insoluble in water and organic compounds and thus not mitigate in liquid media and stable for long periods of time (See Worely, column 1).

6. With respect to Claims 9 and 20: See Quincy, page 4, paragraph 0045.

7. With respect to Claims 14, 15, 24 and 25: Quincy discloses the amount of hydantoin used is 6% but fails to teach it being 0.5-5% or even 1-3%. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the hydantoin be present in 1-3%, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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8. With respect to Claims 26-29: the formation of the nonwoven fibers being spunbond, meltblown, bonded-carded or airlaid, is a Product-by-Process limitation, and these limitations are not limited to the manipulations of the steps only the structure implied by these steps (See MPEP 2113). It follows that if the product in the claim with the product-by-process limitation is the same as the product of the prior art, the claims is unpatentable even though the prior art product was made by a different process, therefore the non-woven fibers being spunbond, meltblown, bonded-carded and airlaid, is anticipated by the Quincy reference.

9. Claims 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quincy, III in view of Worley et al. as applied to claims 1, 13 and 23 above, and further in view of Beerse et al. (6,183,763).

10. Quincy and Worley above, discloses the use of the hydrogenated polystyrene hydantoin for use in person articles as odor absorbents and biocidal agents. However Quincy and Worely do not disclose the articles to be food wipes or industrial wipes. Beerse discloses the use of anti-microbial wipes with a hydantoin compound (column 6, line 52), used in for food preparation as well as in an industrial setting (column 1, lines 6-27, 49-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have the articles of Quincy and Worely, be the wipes of Beerse, in order to provide a personal cleansing wipe which would eliminate bacteria on hard surfaces. (see Beerse, column 1).

Response to Arguments

Applicant's arguments filed 22 September 2003 have been fully considered but they are not persuasive.

Worley et al. (6,548,054) disclose the halogenated polystyrene hydantoin described in the claims. Worley discloses a halogenated polystyrene hydantoin including a plurality of repeating units, each repeating unit including an amide nitrogen and an imide nitrogen, as shown in column 4, lines 34-50. The amide nitrogen is chemically linked to an atom designated X, and the imide nitrogen to an atom designated X'. X and X' are disclosed in column 4, lines 53-55, as being chlorine, bromine, or hydrogen, with at least one of X and X' being a halogen. Worley therefore discloses several embodiments, one being the situation in which X is a halogen and X' is hydrogen, with 100% of the halogens being linked to the amide nitrogen. This embodiment disclosed by Worley fulfills all claimed limitations with respect to the halogenated polystyrene hydantoin.

Worley et al. (6,548,054) teach an improvement to the article disclosed by Quincy, III (US 2002/0077612 A1) by providing a biocidal polymer that is insoluble in water, as disclosed by Worley in column 1, lines 41-42.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

CLA

cla
November 20, 2003



WEILUN LO
SUPERVISORY PATENT EXAMINER
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